WHAT IS CLAIMED IS:

1. A file cache management system for managing a plurality of files operable to be provided by an application running on a server computer system to at least one client computer system, wherein at least one of the plurality of files includes presentation information characterized by a first presentation state, the file cache management system comprising:

    a subsequent presentation state computation routine operable to cause at least one subsequent presentation state to be computed based on the first presentation state; and

    a presentation state signature computation routine operable to determine a presentation state signature from at least one of the first presentation state and the at least one subsequent presentation state.

2. The file cache management system of claim 1 wherein the server computer system includes a processor, and wherein at least one of the subsequent presentation state computation routine and the presentation state signature computation routine is encoded in a computer readable medium as instructions executable on the processor, the computer readable medium being one of a magnetic storage medium, an optical storage medium, and a communications medium conveying signals encoding the instructions.

3. The file cache management system of claim 1 wherein at least a portion of the presentation information is encoded in a markup language.

4. The file cache management system of claim 3 wherein the markup language is one of Hypertext Markup Language (HTML) and Extensible Markup Language (XML).

5. The file cache management system of claim 1 further comprising a presentation information computation routine operable to compute subsequent presentation information based upon the at least one subsequent presentation state.

1   6. The file cache management system of claim 1 wherein the file cache
2   management system is operable to receive a second presentation state, the file cache
3   management system further comprising a presentation information computation
4   routine operable to compute presentation information based upon the second
5   presentation state.

1   7. The file cache management system of claim 6 wherein the subsequent
2   presentation state computation routine is operable to cause at least one second
3   subsequent presentation state to be computed based on the second presentation state.

1   8. The file cache management system of claim 6 wherein the presentation
2   state signature computation routine is operable to determine a second presentation
3   state signature from the second presentation state.

1   9. The file cache management system of claim 8 wherein the plurality of files
2   includes a second presentation file comprising the presentation information based
3   upon the second presentation state, and a filename based upon the second presentation
4   state signature.

1   10. The file cache management system of claim 1 wherein the at least one of
2   the plurality of files includes at least one of the at least one subsequent presentation
3   state and a presentation state signature from the at least one subsequent presentation
4   state.

1   11. The file cache management system of claim 1 further comprising a file
2   cache operable to store at least one of the plurality of files.

1   12. The file cache management system of claim 11 wherein the file cache is a
2   file server computer system.

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13. The file cache management system of claim 1 wherein the presentation state signature computation routine uses a hashing function to determine the presentation state signature.

14. The file cache management system of claim 13 wherein the hashing function is a one-way hashing function.

15. The file cache management system of claim 14 wherein the one-way hashing function is one of Snefru, N-Hash, MD5, Secure Hash Algorithm (SHA), RIPE-MD, and HAVAL.

16. The file cache management system of claim 1 wherein the at least one of the plurality of files further includes a subsequent presentation state and a subsequent presentation state signature.

17. The file cache management system of claim 16 wherein the at least one of the plurality of files further includes a Universal Resource Locator (URL) comprising the subsequent presentation state and the subsequent presentation state signature.

18. The file cache management system of claim 1 wherein the at least one subsequent presentation state is determined by one or more options selectable by a user when the user interacts with a presentation caused when the at least one of the plurality of files is processed by the at least one client computer system.

19. The file cache management system of claim 1 wherein the at least one subsequent presentation state includes subsequent presentation state computation routine version information.

20. The file cache management system of claim 1 wherein the first presentation state includes version information, the version information describing at least one of the subsequent presentation state computation routine and data used to define the first presentation state.

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1   21. The file cache management system of claim 1 further comprising a file

2   cache and a look-ahead manager, the look-ahead manager operable perform at least

3   one of:

4   determining if the file cache includes a file having presentation information

5   characterized by the at least one subsequent presentation state; and

6   causing a presentation information computation routine to compute subsequent

7   presentation information based upon the at least one subsequent

8   presentation state.

1   22. The file cache management system of claim 21 wherein the determining is

2   includes searching the file cache for a file having a filename including the

3   presentation state signature from the at least one subsequent presentation state.

1   23. The file cache management system of claim 1 further comprising a web

2   server application operable to receive, from the application, the information provided

3   to the at least one client computer system, wherein the web server is operable to

4   transmit the information provided to the at least one client computer system.

1   24. The file cache management system of claim 1 wherein the application is a

2   web server application.

1   25. The file cache management system of claim 1 wherein the application

2   includes at least one of the subsequent presentation state computation routine and the

3   presentation state signature computation routine.

1   26. The file cache management system of claim 1 wherein the client computer

2   system is one of a plurality of interconnected client computer systems operating in a

3   distributed computing environment and coupled to the server computer system.

1   27. The file cache management system of claim 26 wherein the plurality of

2   interconnected client computer systems and the server computer system are coupled

3   via a network.

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1   28. The file cache management system of claim 27 wherein network is the

2   Internet.

1   29. A method of caching a file including presentation information

2   characterized by a first state, the file operable to be provided by an application

3   running on a server computer system to at least one client computer system, the

4   method comprising:

5   receiving a file request including information based on the first state from the

6   at least one client computer system;

7   determining whether the file exists in a cache;

8   retrieving the file and transmitting the file to the at least one client computer

9   system when the file exists in the cache;

10   computing presentation information based on the first state when the file does

11   not exist in the cache; and

12   saving the computed presentation information in a file in the cache and

13   transmitting the file to the at least one client computer system.

1   30. The method of claim 29 wherein the file request includes at least one of a

2   filename based on the first state, and first state information.

1   31. The method of claim 29 wherein the file request includes a filename

2   computed from first state information using a hash function.

1   32. The method of claim 31 wherein the hash function is a one-way hash

2   function.

1   33. The method of claim 29 wherein the file request is a URL.

1   34. The method of claim 29 wherein the determining further comprises

2   monitoring for a file not found error, and causing the computing presentation

3   information when a file not found error occurs.

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1   35. The method of claim 34 wherein the file not found error is an HTTP error

2   404.

1   36. The method of claim 29 wherein the computing further comprises:

2   computing at least one subsequent state based on the first state;

3   computing a signature of the at least one subsequent state based on at least one

4   subsequent state; and

5   including the signature of the at least one subsequent state and the at least one

6   subsequent state in the presentation information.

1   37. The method of claim 29 encoded in a computer readable medium as

2   instructions executable on a processor, the computer readable medium being one of a

3   magnetic storage medium, an optical storage medium, and a communications medium

4   conveying signals encoding the instructions.

1   38. A file encoded in a computer readable medium as instructions executable

2   on a processor, wherein the computer readable medium is one of a magnetic storage

3   medium, an optical storage medium, and a communications medium conveying

4   signals encoding the instructions, the file including:

5   presentation information characterized by a presentation state; and

6   a filename computed from the presentation state.

1   39. The file of claim 38 wherein at least a portion of the presentation

2   information is encoded in a markup language.

1   40. The file of claim 39 wherein the markup language is one of Hypertext

2   Markup Language (HTML) and Extensible Markup Language (XML).

1   41. The file of claim 38 wherein the filename includes a hash value computed

2   from the presentation state by a hashing function.

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1   42. The file of claim 41 wherein the hashing function is a one-way hashing

2   function.

1   43. The file of claim 38 further comprising at least one subsequent

2   presentation state and at least one associated subsequent presentation state signature.

1   44. The file of claim 42 further comprising a Universal Resource Locator

2   (URL) including the at least one subsequent presentation state and the at least one

3   associated subsequent presentation state signature.

ADD A11

ADD B2

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